PEACE/WILLISTON
FISH & WILDLIFE
COMPENSATION
PROGRAM

BC hydro

BRITISH
COLUMBIA

A Reconnaissance Survey Of Gataiga Lake

A. R. McLean
1991

PWFWCP Report No. 106

The Peace/Williston Fish & Wildlife Compensation Program is a cooperative venture of BC Hydro and the provincial fish and wildlife management agencies, supported by funding from BC Hydro. The Program was established to enhance and protect fish and wildlife resources affected by the construction of the W.A.C. Bennett and Peace Canyon dams on the Peace River, and the subsequent creation of the Williston and Dinosaur Reservoirs.

Peace/Williston Fish and Wildlife Compensation Program, 1011 Fourth Ave. 3rd Floor, Prince George B.C. V2L 3H9

Website: *www.bchydro.bc.ca/environment/initiatives/pwcp/*

This report has been approved by the Peace/Williston Fish and Wildlife Compensation Program Fish Technical Committee.

Citation: A. R. McLean. 1991. A reconnaissance survey of Gataiga Lake. Peace/Williston Fish and Wildlife Compensation Program, Report No. 106. 22pp plus appendices.

Author(s): Allister R. McLean[1]
Address(es): [1] Peace/Williston Fish and Wildlife Compensation Program, 1011 Fourth Ave., 3rd Floor Prince George, B.C. V2L 3H9

105-02711/

A RECONNAISSANCE SURVEY OF

GATAIGA LAKE

WATERSHED: Parsnip River

DATE OF SURVEY: Mav 30. 31. 1991

FIELD CREW LEADER: A.R. McLean

FIELD ASSISTANT: A.R. Langston

WILLISTON/PEACE FISHERIES COMPENSATION PROGRAM

B. C. HYDRO

ENVIRONMENTAL RESOURCES

and

B.C. ENVIRONMENT

RECREATIONAL FISHERIES BRANCH

REPORT PREPARED BY: A.R. McLean

REPORT EDITED BY: A.R. Langston/B.G. Blackman

RELEASED BY: _____

D.H.G. Ableson, Regional Fisheries Biologist

LAKE: Gataiga **SYSTEM NAME:** Gataiga C.

A.S.A.P. REFERENCE NO.: **SYSTEM NO:** 230-9062

DATA ON FILE FOR THIS SURVEY

Location	x	Dissolved 02/Temp. Profiles	x
Physical Data	x	Winter Dissolved 02/Temp. Profiles	--
Bench Mark	x	Netting Record	x
Terrain Features	x	Lake Catch Summary	x
Access	x	Individual Fish Data	x
Resorts and Campsites	x	Fish Preserved	x
Other Developments	x	Stomach Analysis	x
Obstructions and Pollutions	x	Scale Reading	x
Special Restrictions	x	Location of Inventory Sites	x
Aquatic Plants	x	Photograph Directory	x
Wildlife Observations	x	Appendices:	
Miscellaneous Comments	x	A: Water Chemistry Analysis	x
Lake Drainage	x	B: Tributary Stream Data	x
Fisheries Management Comments	x	Bathymetric Map Reduction	x
History of Previous Surveys	x	Bathymetric Map	x
Water Chemistry Summary	x		

LOCATION

Location: 10 km south of Mackenzie
Elevation: 706 m +/-
Latitude/Longitude: 55°14'05":123°03'43" U.T.M.: 10.4961.61207
Management Unit: 7-30 N.T.S. Map No.: 93-0/3

Drainage: Gataiga C. --> Williston Reservoir (Parsnip Reach) --> Peace R.

PHYSICAL DATA

Lake Drainage Area:	--	km^2	Volume:	2 274 000	m^3
Water Surface Area:	409000	m^2	Flushing Rate:	--	
Area above 6 m contour:	212000	m^2	Perimeter of Islands:	--	m
Shoreline Perimeter:	3150	m	Number of Islands:	0	
Maximum Depth:	12.0	m	Mean Depth:	5.6	m
Filterable Residue (TDS):	84	mg/l	Secchi Reading:	3.85	m

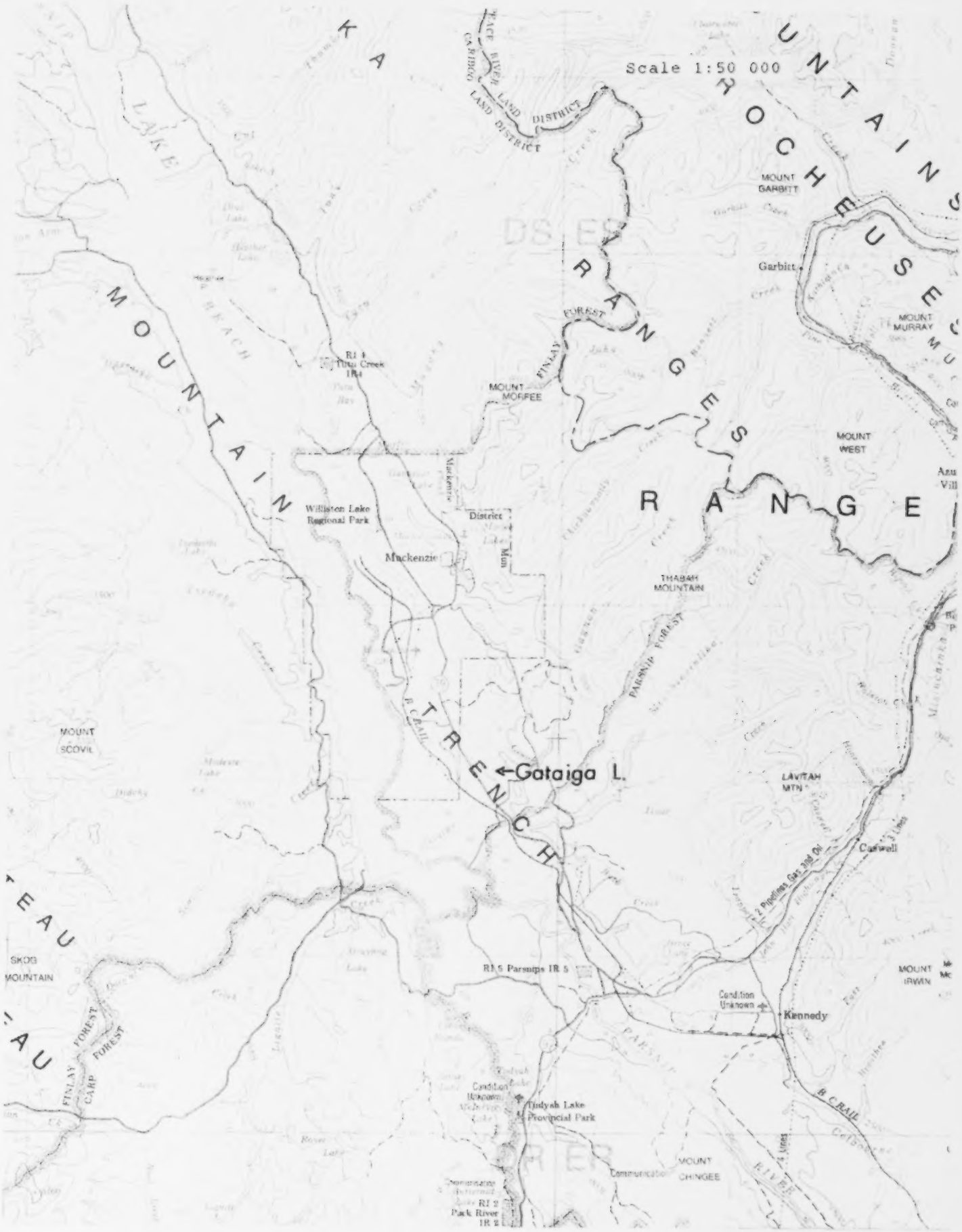
Sounding Device: Lowrance X-15

Elevation Source: NTS Map 93-0/3, edition 3. Lake elevation printed on map.

BENCHMARK

(Iron spike, center of red circle) located at the Forest Recreation Site, approx. 5.6 m from water's edge in a 28 cm diameter Lodgepole pine. Bench mark set 2.0 m above present water level.

High water mark: Lake appears to be a maximum pondage.


Scale 1:50 000
MOUNTAINS
ROCHE
MOUNT GARBITT
Garbitt
MOUNT MURRAY
RANGES
FINLAY FOREST
MOUNT MORFEE
MOUNT WEST
MOUNTAIN
Williston Lake Regional Park
Mackenzie
District
Mackenzie
THABAH MOUNTAIN
PARSNIP FOREST
MOUNT SCOVIL
TRENCH
Gataiga L.
LAVITAH MTN
Caribou Land District
Face River Land District
Caribou Land District
SKOO MOUNTAIN
FINLAY FOREST
CARP FOREST
RI 5 Parsnips IR 5
Condition Unknown
Kennedy
MOUNT IRWIN
Tidyah Lake Provincial Park
MOUNT CHINGEE
RI 2 Park River IR 2
B C RAIL
Caribou Land District

Lake: **GATAIGA**

TERRAIN FEATURES

Immediate Shoreline:

The terrain immediately surrounding the lake has a low to moderate slope. Gataiga Lake is treed to lake's edge with an intermittent fringe of alder/aspen fronting the shoreline. Sedgegrass/horsetail extends into the lake at various locations. Boating access from lake to shore is generally good. Boating access to the lake is limited to the Recreation Site (B.C. Forest Service) located at the southwest end of the lake. Two small marshes are located at the northeast and southwest corners of the lake. A moderate size marsh is located at the west end and a large marsh is located at the south end of the lake. These marshes consist of sedgegrass, stunted alder, and horsetail, with small amounts of black spruce intermixed throughout. Shoreline substrate consists primarily of organics, with some small gravel noted on the southwest shore. Lake bottom drops off gradually from shore.

Surrounding Country:

The continuous forest cover is dominated by mature black spruce and Lodgepole pine. Less numerous are alder, trembling aspen, douglas fir and birch. Gataiga Lake is surrounded by gently sloping terrain and is located within the sub-boreal spruce biogeoclimatic zone.

Lake: **GATAIGA**

ACCESS

Directions:

From Mackenzie, at the junction of Centennial and Mackenzie Boulevard, drive south 13.7 km on Highway 39. Turn left on to a gravel road (sign is present on highway). Proceed 0.2 km and take the left fork. Proceed another 0.3 km to Forest Recreation Site. A 50 m walk to lake shore (visible) remains. Total distance from Mackenzie to Gataiga Lake by vehicle is 14.2 km.

Road Type and Conditions:

Highway 39 is a well maintained paved two-lane highway. The road into Gataiga Lake is a hard packed, single lane, gravel, all weather road suitable for any type of vehicle.

Restrictions:

None noted.

RESORTS AND CAMPSITES

A day use recreation site (B.C. Forest Service) is located at the southwest end of the lake. This site has 4 picnic tables, 4 fire pits, 1 outhouse, and parking for 10 vehicles (Pers. Comm., J. Ladds, Mackenzie Forest Service).

OTHER DEVELOPMENTS

None noted.

Lake: **GATAIGA**

OBSTRUCTIONS AND POLLUTIONS

Inlets #1 and #2 both have beaver dams, located approx. 80 m upstream of the lake, which may be obstructions to upstream fish passage. The outlet of Gataiga Lake is choked with beaver dams, one or more of which appear to be barriers to upstream fish passage.

SPECIAL RESTRICTIONS

None noted.

AQUATIC PLANTS

Nuphar sp. and Ceratophyllum sp. were sparsely scattered around the lake, while Equisetum sp. and sedgegrass were present in moderate to high quantities.
No samples were collected.

WILDLIFE OBSERVATIONS

2 golden eye
8 unidentified waterfowl
10 Canada geese
2 beavers
2 osprey
1 red winged blackbird
1 robin

MISCELLANEOUS COMMENTS

1. Two anglers fishing for 1.25 hours caught 4 rainbow trout.
2. Rainbow trout were noted jumping in evening.
3. Local anglers indicated the presence of a Ducks Unlimited nesting box project in the outlet area.
4. 313 user days were recorded for the Gataiga Lake Recreation site in 1990 (Pers. Comm., J. Ladds, Mackenzie Forest Service).
5. Redside shiners were attempting to spawn approx. 180 m upstream from Gataiga Lake on inlet #1. Redside shiners were also noted in the beaver pond, located 200 m upstream of the lake on inlet #1.
6. Bathymetric map: The lake outline is from an enlargement of aerial photograph B.C. 4162 No. 162, flown August, 1963.

Lake: **GATAIGA**

LAKE DRAINAGE

General:

Gataiga Lake has 2 inlets and one outlet. The outlet flows approximately 7.8 km southwest to its confluence with Williston Reservoir (Parsnip Reach).

Major Systems:

There are no major systems.

Minor Systems:

Unnamed C. - inlet #1

The first 200 m of this inlet was investigated. A beaver dam (approx. 25 m x 0.7 m) is located approximately 80 m upstream from the lake. This inlet, which enters Gataiga Lake at the northeast end, has an average wetted width of 1.2 m, average depth of 0.5 m and a gradient of 0.2%, 140 m upstream of the lake. A beaver pond (estimated 1.0 m mean depth) is located approximately 200 m upstream from Gataiga Lake. Water level in the pond is controlled by an old, inactive, beaver dam (approx. 35 m x 1.0 m). This inlet offers no salmonid spawning habitat but fair juvenile rearing capabilities (undercut banks, L.O.D., overhanging vegetation).

Refer to stream data sheet for additional information.

Lake: **GATAIGA**

Unnamed C. - inlet #2

The first 75 m of inlet # 2 was investigated. An old, inactive, beaver dam (approx. 150 m in width by 1.0 m in height) is located approximately 65 m upstream from the lake. This inlet which enters the lake on the west shore, has an average 1.0 m wetted width and a 20 cm mean depth. Inlet #2 has marginal rearing (undercut banks, overhanging vegetation) and no spawning habitat (total organic substrate) available.

Gataiga C. - outlet

The lake level is controlled by a beaver dam (approx. 100 m in length by 1.5 m in width) located 1.75 km downstream of the main lake body. The 1.75 km portion of lake, prior to the dam, consists of a floating sedgegrass marsh with a navigable channel. High beaver activity was noted downstream of the dam which controls the lake level. The outlet has a complete organic substrate, subsequently no spawning habitat is available.

Lake: **GATAIGA**

FISHERIES MANAGEMENT COMMENTS

Gataiga Lake supports a population of both rainbow trout and assorted coarse fish. A 24 hour net set produced 38 rainbow trout (average length 23.2 cm., average weight 137.5 g) and a number of coarse fish species. No salmonid spawning habitat was observed, however, a number of rainbow trout examined had successfully released their eggs. This suggests that suitable spawning locations are available, possibly through the presence of an underwater spring or downstream of the lake.

Discussions with 12 local (Mackenzie) anglers indicated poor fishing in Gataiga Lake most of the year and no fish over 500 g. Anglers suggested that, while this lake is not their first choice for fishing, it is well suited for a family fishery/recreation area.

No suitable enhancements were identified for this lake. The creation of additional spawning habitat would be difficult, due to high beaver activity. Management of the native rainbow stocks present should be continued.

HISTORY OF PREVIOUS SURVEYS

Lake Surveys:

No previous surveys known.

Other Related Surveys:

None known.

Lake: **GATAIGA**

WATER CHEMISTRY SUMMARY **Limnology Station No. 1**

Field Conditions:

Date:	May 30, 1991		
Time:	1600 hrs	Air Temperature:	19 °C
Wind Velocity:	10-15 km/hr	Wind Direction:	south
Cloud Cover:	9/10 o.c.	Surface Condition:	light ripple
Secchi Disc:	3.85 m	Water Colour:	tannic

Method(s) Used:

Dissolved Oxygen:	YSI model 58 oxygen/temperature meter
Water Temperature:	YSI model 58 oxygen/temperature meter
Air Temperature:	Hand-held alcohol thermometer
pH (field):	Digital pH pocket tester
H2S (field):	Hach H2S field test kit
Laboratory Used:	Zenon Environmental Inc. B.C. Laboratory Services
Water Sampler:	Verticle Alpha Water Bottle (Vandorn)
Substrate Sampler:	Substrate sample not taken

Water Sample Chemistry: SEAM Site No.: Not determined

	Sampling Depths	
	Surface (O m)	Lower (10.5 m)
pH (field)	8.1	8.0
pH (lab)	7.5	7.4
Specific Conductance (lab)	107 umhos/cm	182 umhos/cm
Filterable Residue 105°C (lab)	84 mg/l	120 mg/l
H2S (field)	-- mg/l	0 mg/l

Bottom Depth:	12 m
Substrate Sample Depth:	-- m

NOTE: Water samples too long in transit to guarantee the accuracy of lab pH results.

Lake: **GATAIGA**

DATE: May 30, 1991

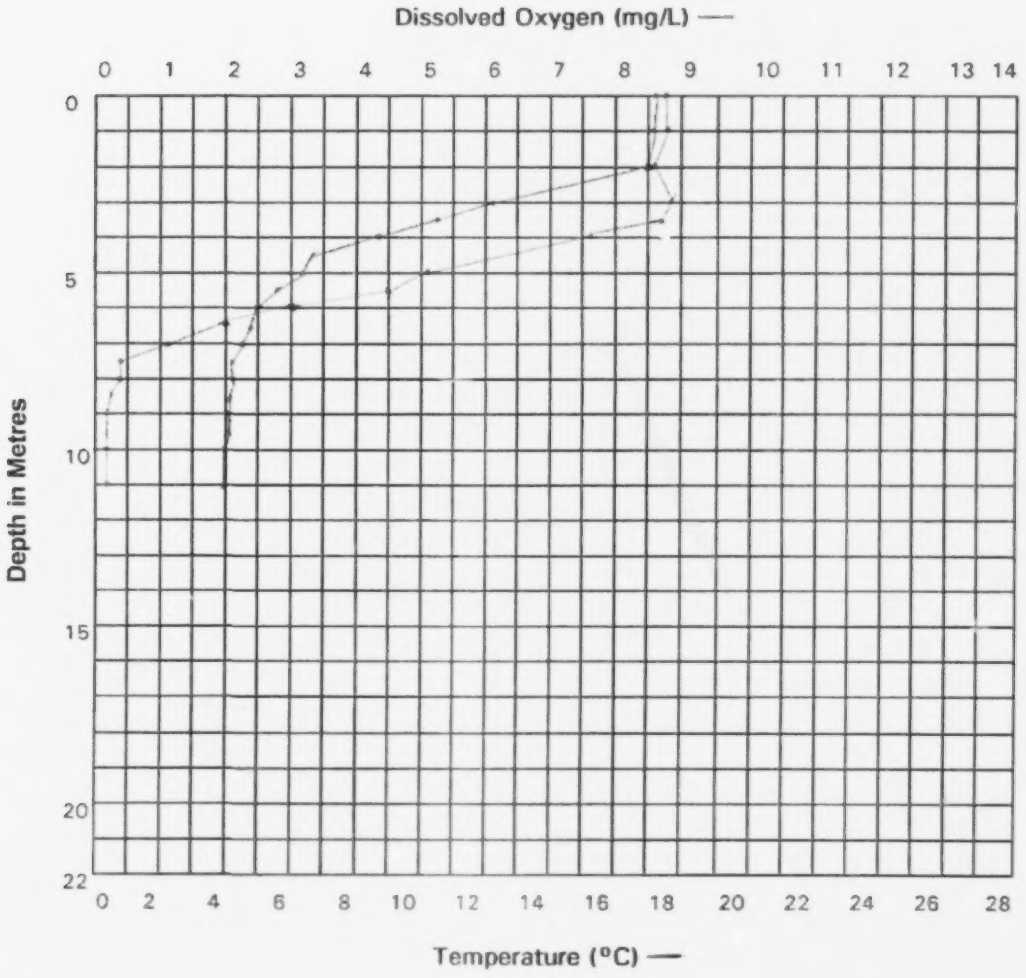
SUMMER OXYGEN/TEMPERATURE DATA

DEPTH (m)	02 (mg/l)	TEMP (°C)
Surface	8.8	17.2
1.0	8.8	17.1
2.0	8.6	17.0
3.0	8.9	12.2
3.5	8.7	10.5
4.0	7.6	8.4
4.5	6.4	6.7
5.0	5.1	6.3
5.5	4.5	5.7
6.0	3.0	5.0
6.5	2.0	4.8
7.0	1.2	4.3
7.5	0.4	4.2
8.0	0.4	4.2
8.5	0.3	4.1
9.0	0.2	4.1
9.5	0.2	4.1
10.0	0.2	4.0
11.0	0.2	4.0
12.0	Bottom	

Lake: **GATAIGA**

SUMMER

DISSOLVED OXYGEN AND TEMPERATURE SERIES



Lake: **GATAIGA**

NETTING RECORD

Mesh sizes experimental order: 25, 76, 51, 89, 38, 64 mm

NETTING SITE #1

Type:	Sinking monofilament		
Date Set:	May 30, 1991	Time:	1100 hrs
Date Lifted:	May 31, 1991	Time:	1030 hrs
Net Dimensions:	Length: 91.4 m	Depth:	2.4m
Shallow End Mesh Size:	64 mm	Depth:	1 m
		Substrate:	organics
Deep End Mesh Size:	25 mm	Depth:	4.5 m
		Substrate:	organics

Lake: **GATAIGA**

LAKE CATCH SUMMARY

SPECIES	NET SITE NO.				ANGLED	OTHER	TOTAL	NUMBER SAMPLED	NUMBER PRESERVED	SIZE RANGE (cm)
	1	2	3	4						
rainbow trout	38				4		42	41		11.1 -31.7
northern squawfish	6						6			10.7 -42.1
peamouth chub	80						80			11.1 - 18.8
large scale suckers	40						40			11.4 - 39.0

Minnow Traps:

BAIT: Sardines

#	HOURS	DEPTH (m)	SUBSTRATE	SPECIES	SIZE RANGE (cm)
1	25.00	1.2	organics	1 large scale sucker	10.5
2	25.00	0.8	organics	20 redside shiners 1 sculpin 1 peamouth chub	4.4 - 7.8 11.2 14.4

Lake: **GATAIGA**

INDIVIDUAL FISH DATA

Date Captured: MAY31. 1991

Method of Capture: Sinking monofilament gillnet

M - Male, F - Female, ? - Not Obvious
IMM - Immature, MG - Maturing, MT - Mature, GV - Gravid, SP - Spent, ? - Not Obvious
EG - Egg, FR - Fin Ray, HD - Head, ML - Mit, OT - Otolith
SC - Scale, ST - Stomach, TG - Fish Tag, WF - Whole Fish

SPECIES	Fork Length (cm)	Weight (grams)	Sex	Gonadal Maturity	Sample Type	Age (yr)	Stomach Contents				COMMENTS
							Plankton	Insects	Fish	Other	
Rainbow trout	11.1	10	?	IMM	SC	2+		beetle			
Rainbow trout	12.0	10	?	IMM	SC	2+		beetle			
Rainbow trout	13.3	10	F	IMM	SC	2+		beetles			
Rainbow trout	14.1	10	F	IMM	SC	2+		beetle			tapeworm in body cavity
Rainbow trout	20.9	80	M	MT	SC	3+		beetles			
Rainbow trout	20.9	80	M	IMM	SC	3+		beetles			tapeworms in body cavity
Rainbow trout	21.2	95	M	IMM	SC	4		beetles			
Rainbow trout	21.3	80	F	MG	SC	3		beetles			tapeworms in body cavity
Rainbow trout	22.0	90	M	IMM	SC	3		beetles			
Rainbow trout	22.1	105	M	?	SC	3		beetles mosquitos			tapeworms in body cavity
Rainbow trout	22.2	100	F	IMM	SC	3+		beetles			tapeworms in body cavity
Rainbow trout	22.5	190	M	MG	SC	3		unidentified larvae			
Rainbow trout	22.9	100	F	MG	SC	4		spiders beetles			
Rainbow trout	23.1	110	M	IMM	SC	3+		beetles			tapeworm in body cavity
Rainbow trout	23.6	115	F	MT	SC	3		unidentified larvae			
Rainbow trout	24.2	150	M	MG	SC	3+		beetles		tapeworm	
Rainbow trout	24.8	140	F	SP	SC	4		beetles			
Rainbow trout	25.3	155	M	MG	SC	3+		beetles			
Rainbow trout	25.4	170	F	MG	SC	3+		beetles		worms	
Rainbow trout	25.4	175	F	MG	SC	3+		beetles			
Rainbow trout	25.6	180	F	MG	SC	3+		beetles		worms	
Rainbow trout	25.7	150	F	SP	SC	3+		beetle		worms	5 eggs retained
Rainbow trout	26.3	160	F	MG	SC	3+		beetles			
Rainbow trout	26.6	180	F	MG	SC	4+		beetles			
Rainbow trout	27.3	210	M	MG	SC	3+		beetles			tapeworm in body cavity

AGE DETERMINATION COMPLETED UNDER CONTRACT BY:

Margaret McDonald, Box 243, Midway, B.C., VOH 1 MO

Lake: **GATAIGA**

INDIVIDUAL FISH DATA

Date Captured: MAY 31. 1991

Method of Capture: ANGLED

M - Male
F - Female
? - Not Obvious

IMM - Immature
MG - Maturing
MT - Mature
GV - Gravid
SP - Spent
? - Not Obvious

EG - Egg
FR - Fin Ray
HD - Head
ML - Milt
OT - Otolith

SC - Scale
ST - Stomach
TG - Fish Tag
WF - Whole Fish

SPECIES	Fork Length (cm)	Weight (grams)	Sex	Gonadal Maturity	Sample Type	Age (yr)	Plankton	Stomach Contents			COMMENTS
								Insects	Fish	Other	
Rainbow trout	28.0	240	F	MG	SC	3+		beetles			
Rainbow trout	28.8	240	M	SP	SC	3					
Rainbow trout	30.3	250	F	SP	SC	4+					36 eggs retained
Rainbow trout	31.7	315	M	MT	SC	4		beetles		worms 1 fish egg	tapeworms in body cavity

AGE DETERMINATION COMPLETED UNDER CONTRACT BY:
Margaret McDonald, Box 243, Midway, B.C., VOH 1MO

1	Plate number, area, and direction
2	Point sample, number, and location
	Bench mark
LS 1	Limno station location and number
0 - - - 0 NS 1	Netting site location and number
1	Stream flow direction and number

LOCATION OF INVENTORY SITES

Figure 1

Lake: Gataiga

Reference No.: B.C. 4162:167

Reference Date: August, 1963

Scale 1:8329

1	Plate number, area, and direction
2	Point sample, number, and location
	Bench mark
LS 1	Limno station location and number
0 - - - 0 NS 1	Netting site location and number
1	Stream flow direction and number

LOCATION OF INVENTORY SITES

Figure 1

Lake: Gataiga

Reference No : B.C. 4162:167

Reference Date: August, 1963

Scale 1:8329

Lake: **GATAIGA**

Plate 1: Panoramic view looking south towards outlet, from middle of lake.

Lake: **GATAIGA**

Plate 2: View of inlet #2. Taken from lake.

Plate 3: View downstream at inlet #2.
Taken approx. 65 m upstream from lake.

Lake: **GATAIGA**

Plate 4:
View looking downstream at sample site #1 on inlet #1. Taken approx. 160 m upstream from lake.

Plate 5:
View looking upstream at sample site #1 on inlet #1. Taken approx. 160 m upstream from the lake.

Lake: **GATAIGA**

Plate 6:
View looking upstream at typical section of outlet.
Taken approximately 500 m downstream of the main lake body.

Lake: **GATAIGA**

PHOTOGRAPH DIRECTORY

Negative #	Plate #	Description
R1:20A,22A	1	Panoramic view looking south towards outlet, from middle of lake.
R2:11	2	View of inlet #2. Taken from lake.
R2:10	3	View downstream at inlet #2. Taken approx. 65 m upstream from lake.
R2:7	4	View looking downstream at sample site #1 on inlet #1. Taken approx. 160 m upstream from lake.
R2:8	5	View looking upstream at sample site #1 on inlet #1. Taken approx. 160 m upstream from lake.
R2:14	6	View looking upstream at typical section of outlet. Taken approx. 500 m downstream of the main lake body.

Lake: GATAIGA

Appendix A

LABORATORY REPORT

Water Chemistry Analysis

B.C. LABORATORY SERVICES
Report for form 03000084

FISH - PRINCE GEORGE ATTN: ALLISTER McLEAN

Site: NOSITE GATAIGA LAKE

Submitted by (23286) BLACKMAN B

Address (07) Waste Management Branch
Northern Region
3rd Floor, 1011 4th Avenue
Prince George, BC V2L 3H9

B.C. MINISTRY OF ENVIRONMENT
JUN 19 1991
RECEIVED
PRINCE GEORGE, B.C.

Phone No. 565-6944

Audit Sample ( )
Client study reference code ( )
Sampling agency code (91)

Site (NOSITE) GATAIGA LAKE

Sample Adjective ( )
Sample State (FW) Fresh Water
Sample Descriptor (GE) General

This form was processed to the computer on 4-JUN-1991 as REGULAR
The cost for analyzing samples for this form is

Routine analysis:	$	116.84
Special analysis:	$	0.00
Total	$	116.84

FISH - PRINCE GEORGE ATTN: ALLISTER McLEAN Sample 91009120

Site: MOSITE CATAIGA LAKE

From : 91/05/30 0001 To : 91/05/30 0001
Depth Range : 0.0 0.0 Tide :
Sample State: Fresh Water
Sample Comment:

Parameter Description	Result	Units	Analytical Technique (Sparcode/Medium/Pres'n)
pH	?	pH units	Automated pH Meter (00041220/02/01)
Result 7.5, pH units Analyzed outside of optimal time frame.			
Residue Nonfilt	1	mg/L	Gravi 9 cm Buchner, 105C (00081070/02/01)
Specific Conductance	107	uS/cm	Cond. Meter Siebold (00111160/02/01)
Res Filterable 1.0u	84	mg/L	Gravimetric 1.0u Filter (007H1032/02/01)
Alkalinity Total 4.5	?	mg/L	Automated Electrometer (01021210/02/01)
Result 52.8, mg/L. Analyzed outside of optimal time frame.			

FISH - PRINCE GEORGE ATTN: ALLISTER McLEAN Sample 91009121

Site: NOSITE GATAIGA LAKE

From .91/05/30:0002 To :91/05/30:0002
Depth Range : 10.5 10.5 Tide :
Sample State: Fresh Water
Sample Comment:

Parameter Description	Result	Units	Analytical Technique (Sparcode/Medium/Pres'n)
pH	?	pH units	Automated pH Meter (00041220/02/01)
Result 7.4, pH units. Analyzed outside of optimal time frame.			
Residue Nonfilt.	5	mg/L	Grav, 9 cm Buchner, 105C (00081070/02/01)
Specific Conductance	182	uS/cm	Cond. Meter Siebold (00111160/02/01)
Res. Filterable 1.0u	120	mg/L	Gravimetric 1.0u Filter (007H1032/02/01)
Alkalinity Total 4.5	?	mg/L	Automated Electrometer (01021210/02/01)
Result 93.9, mg/L. Analyzed outside of optimal time frame.			

Lake: GATAIGA

Appendix B

TRIBUTARY STREAM DATA

Lake: **GATAIGA**

System Name: **Gataiga C.** **inlet**

System No.:

Site Location: Sample Site #1, located 140 m upstream from Gataiga Lake on inlet f1

Date:	May 31, 1991	Time:	1505 hrs
Channel Width:	1.5 m	Water Temp.:	15 °C
Wetted Width:	1.2 m	Stage (flow)	high
Max. Depth:	50 cm	Velocity:	4.25 m/sec
Avg. Depth:	10 cm	Field Gradient:	0.2 %
Turbidity:	10.0 cm	Colour:	clear

Flood Signs:

Height: -- cm

Type:

Substrate Breakdown:

Fines	Small Gravel	Large Gravel	Cobble
100 %	0 %	0 %	0 %

Boulder	Bedrock
0 %	0 %

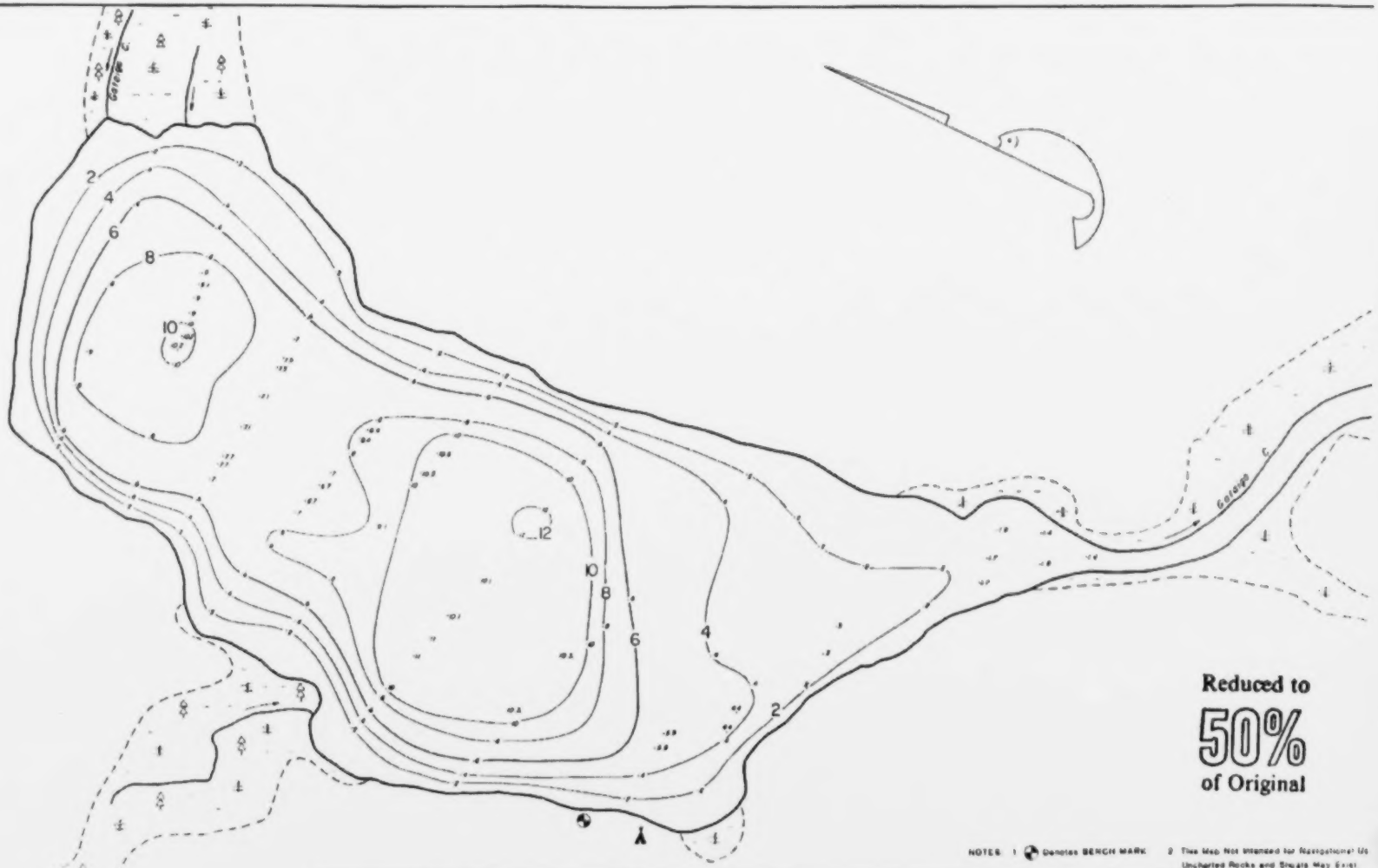
Substrate Compaction: Loose Sand: 70%

Banks:

	Form	Height	Stability
Right	undercut	0.5 m	unstable
Left	undercut	0.4 m	unstable

Comments:

- Gradient and velocity measured over 4.0 m.
- No salmonid spawning habitat.
- Fair juvenile rearing habitat (undercut banks, overhanging vegetation, L.O.D.).
- No overwintering habitat.



Reduced to 50% of Original

NOTES: 1 ◔ Denotes BENCH MARK 2 This Map Not Intended for Navigational Use Uncharted Rocks and Shoals May Exist

INSET MAP
Scale 1:600,000

SURVEYED BY: A.R. McLEAN DATE: MAY 31, 1968
OUTLINE SOURCE: AIRPHOTO BC 4182 K57 (AUGUST 1963)

STATISTICS AT TIME OF SURVEY

ELEVATION	706 m.±
SURFACE AREA	409 000 sq. m
AREA ABOVE 6m. CONTOUR	212 000 sq. m
VOLUME	2 276 000 cu. m.
MEAN DEPTH	5.6 m.
MAX. DEPTH	12 m.
PERIMETER, MAIN SHORE	3150 m
PERIMETER, ISLANDS	m.
BENCH MARK HEIGHT ABOVE WATER LEVEL	2.0 m

Province of British Columbia Ministry of Environment

FISHERIES BRANCH
INVENTORY OPERATIONS

GATAIGA LAKE

DEPTHS IN METERS

WATERSHED CODE: 230-9062	U.T.M. CO-ORDINATE: 10 490894 6619370	
MAP: 94-P-10	FAIR DWG: R.A.D.	REV. DATE
PLOTTING: R.S.D.	FAIR DWG. CHECK: D.M.C.	SCALE: 1:3000
CONTOURS: J.A.B.	DRAFT DATE: FEB 15, 1972	
CALCULATING: D.M.C.	APPROVED:	M.E.S. NO. 930/3